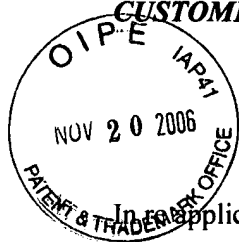IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re: Attorney Docket No. <u>Adler 01.01</u>

In re application of: <u>Richard M. Adler</u>

Serial No.:	<u>10/091,859</u>	Group Art Unit:	<u>3639</u>
Filed:	<u>03/06/02</u>	Examiner:	<u>Nathan Erb</u>
Matter No.:	<u>1099.001</u>	Phone No.:	<u>571-272-7606</u>

For: <u>System and Computer-Implemented Method for Modeling and Analyzing Strategic Decisions</u>

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

    Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated in the attached Remarks/Arguments section.

Respectfully submitted,

Date: _11/14/06_

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*   *   *   *   *

Certification Under 37 CFR 1.8

Date of Deposit _November 14, 2006_

    I hereby certify that this correspondence is being deposited in the United States Postal Service with sufficient postage as first class mail under 37 CFR 1.8 on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

MARY E. CANIZ

(Name of person mailing)

(Signature of person mailing)

REMARKS/ARGUMENTS

All of the claims stand rejected over Eder, either alone or in combination with other references. Eder discloses software for calculating the financial valuation of an enterprise, based on a combination of user-specified and inferred (induced from data analysis) value drivers (i.e. parameters that correlate with performance) and for allowing users to vary those parameters and to project performance via a static formula. This is a top-down approach that ignores the actual mechanisms (business processes, individual behaviors) that drive performance bottom-up. Eder's outputs, i.e., financial performance metrics, are fixed, and Eder is only concerned with a closed system, namely the enterprise whose value is being determined. However, various aspects of the present invention, as defined in the various pending claims, include providing (a) a platform for creating multiple applications in multiple decision domains, (b) support for qualitative, uncertain, and relational, as well as quantitative attributes, as both inputs and outputs, (c) a means to describe behaviors, including goals and adaptive behaviors of parties responding to their environment and behaviors of other actors, which drives a bottom-up approach to predicting performance or other non-financial outcomes, (d) an explicit methodology for making decisions (running multiple strategies with multiple scenarios of the environment and picking the one that performs the best) and for lifecycle support, and (e) the ability to deal with the enterprise in relation to the dynamic outside world. Eder does not disclose or suggest any of aspects (a) through (e) of the present invention, as defined in the various pending claims.

Rejection of Claims 64-105 as Anticipated by Eder

Claim 64 recites, *inter alia*, that a decision-domain model is "constructed based on a received selection of a predefined model from among a plurality of predefined models of decision domains." In the 10/16/06 Advisory Action (the "Advisory Action"), the Examiner argues that Eder discloses "selecting a predefined model of a decision domain from among a plurality of predefined models of decision domains" (p. 2, pgh. 3). However, nowhere does Eder disclose making any such selection. Eder teaches only a single decision domain, i.e., the decision domain of financial valuation of a commercial enterprise (col. 5, lines 1-11). Eder teaches only a single software application supporting a single decision model that calculates and displays a forecast of the impact of user-specified or system generated changes in business value drivers on other value drivers, elements, financial performance and long-term value of a commercial enterprise, based on information from a detailed valuation of the enterprise (col. 5, lines 1-9). This is a single model, i.e., a single decision domain. The present invention, as claimed in claim 64, provides a generalized framework or platform capable of supporting multiple domain models (e.g., business-related domains, such as B2B channel strategies, mergers & acquisitions, creating or dropping products, business units, or production capacity; and/or non-business domains, such as strategic decision-making in military, legislative, healthcare, environmental, or political domains) from which one predefined domain model is selected. The single-domain software application of Eder is not analogous to the multiple-domain framework of the present invention, which permits the creation of limitless different software applications, only some of which focus on financial decisions as with Eder, for a wide variety of decision domains. While Eder merely gives us a fish, the Applicant gives us a fishing pole. Since Eder fails to disclose a decision domain model "constructed based on a received selection of a predefined model from among a plurality of predefined models of decision domains," Eder cannot anticipate claim 64.

Moreover, claim 64 recites, *inter alia*, "constructing a model of a decision domain for creating a plurality of scenarios in the decision domain." Eder fails to disclose a plurality of scenarios in the decision domain. The portion of the specification cited by the Examiner (col. 5, line 31 to col. 6, line 25) is a table (Table 1) that merely discloses a plurality of algorithms that are used in a single scenario during the execution of Eder's simulator. In fact, Eder even teaches away from the use of running multiple scenarios as in claim 64. Eder avoids running a plurality of simulations by consistently using the enterprise elements and valuation methodologies set forth in the table, rather than varying such factors to create different scenarios that can be compared with one another. Indeed, Eder states that "[u]ncertainty over which method is being used for completing the analysis and the resulting inability to compare different simulations is eliminated in the present invention by consistently utilizing different valuation methodologies for valuing the different elements of the enterprise as shown in Table 1" (col. 5, lines 32-37). In other words, Eder presumes that software or a user would be unable to compare the results from different scenarios, so Eder eliminates the use of different scenarios altogether, instead opting for a single scenario using the valuation methods provided in Table 1. In contrast, in the invention as claimed in claim 64, the success of a decision strategy is assessed and compared across multiple scenarios, since it cannot be known in advance which of the scenarios will represent what actually will happen in the future. Since Eder fails to disclose a plurality of scenarios in a decision domain, Eder also fails to disclose additional features of claim 64, including steps (c) and (d), which both require the existence of alternative scenarios and alternative scenario parameters, as follows: "(c) simulating, for one or more future time instants, each of the one or more alternative scenarios as influenced by (i) each candidate decision represented by the candidate decision parameters and (ii) parameters characterizing assumptions in alternative scenarios;" and "(d) for each candidate decision represented by the candidate decision parameters, outputting simulation results based on the alternative scenario parameters corresponding to the simulated alternative scenarios at one or more future time instants."

In the Advisory Action, the Examiner, for the first time, argues that "the language of claim 64 repeatedly refers to "one OR more alternative scenarios" and that "even a program which only addresses a single scenario is embraced by the language of the claim" (p. 2, pgh. 4). This is plainly incorrect, because claim 64 recites both a baseline scenario AND one or more alternative scenarios, i.e., at least TWO scenarios. Thus, contrary to the Examiner's assertions, a single-scenario program, such as that of Eder, cannot possibly read on claim 64. For similar reasons, claims 104 and 105 are novel over Eder. Since claims 65-103 depend from claim 64, it is further submitted that those claims are also novel over Eder. The foregoing arguments are fully explained at pp. 12-15 of the 9/8/06 Amendment (the "Amendment").

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Rejection of Claims 65 and 107 as Anticipated by Eder

Claim 65 recites, *inter alia*, that the predefined model for the decision domain defines "one or more dynamic behaviors of people, places, things, events, and decision strategies representing sources of change in the decision domain, the dynamic behaviors representing one or more ways entities (i) change over time and (ii) interact with each other, the one or more dynamic behaviors being ascribed to one or more entity types that depict people, places, things, and decision strategies." In the Advisory Action, the Examiner argues that "one of the decisions to be tested in the invention of Eder might be the effect on a business's value of reducing the amount of inventory by fifty percent. That particular decision would be a decision strategy" (p. 2, pgh. 5). This example of a "decision strategy" is fabricated by the Examiner and is nowhere disclosed or even suggested in Eder. The only portion of Eder to which the Examiner cites (col. 5, line 31 – col. 6, line 25) is a table (Table 1) showing various valuation methodologies for valuing different elements of an enterprise. The attributes of these elements are represented by what Eder refers to as "value drivers" having static, numerical values. Since Eder is concerned only with financial valuation, a single set of numerical value drivers is sufficient to model the enterprise in determining its financial value. On the other hand, the present invention, as claimed in claim 65, is capable of modeling multiple actors (e.g., individuals or organization) or other entities in a variety of decision domains. Each actor or entity has its own independent dynamic behaviors, (typically purpose-driven and possibly adaptive changes of state, and relationships over time, in stark contrast to Eder's static numbers. Thus, the present invention, as claimed in claim 65, takes into account decision strategies (such as investment strategies, behavioral responses, etc.) that are followed by these actors or entities. As discussed above with respect to claim 64, Eder's approach involves the use of a static behavioral model. Eder describes how, when one or more value drivers are set to certain numeric values, the remaining numeric value drivers change. There are no "dynamic behaviors" that are being "test-driven" to see how these behaviors affect each of the alternative scenarios, as is the case in the present invention, as claimed in claim 65. Thus, Eder cannot be said to anticipate claim 65. For similar reasons, claim 107, which recites that "each entity class [is] further defined by ... (iii) one or more class interfaces defining methods representing entity behaviors and dynamic interactions," is also novel over Eder. The foregoing arguments are fully explained at pp. 15-16 of the Amendment.

Rejection of Claims 106-114 as Anticipated by Eder

Claim 106 recites, *inter alia*, "(a) constructing a decision model of the decision domain for creating a plurality of scenarios in the decision domain" and "(d) compiling the application database and the specifications to generate the decision-support application, wherein the decision-support application is executable under the decision-support simulator framework." In the Advisory Action, the Examiner argues that Eder "does specify a program, which can be run multiple times, with a different scenario defined each time" (p. 2, pgh. 6). The suggestion that a decision domain model for creating a plurality of scenarios is equivalent to simply running Eder's program multiple times, with a different scenario defined each time, is a concept fabricated by the Examiner and unsupported by Eder. As discussed above with respect to claim 64, the notion of constructing a decision domain model for creating a plurality of scenarios is nowhere disclosed or even suggested in Eder, (and, as discussed above, Eder even explicitly teaches away from and rejects this approach/methodology at col. 5, lines 32-37), because Eder's decision domain model is for only a single scenario. Eder presumes that software or a user would be unable to compare the results from different scenarios, so Eder eliminates the use of different scenarios altogether, instead opting for a single scenario using the valuation methods provided in Table 1.

Moreover, in the Advisory Action, the Examiner further argues that step (d) "is disclosed by Eder in that this step would have to be performed to arrive at the program of Eder which is capable of the functions of that program disclosed by Eder" and that "[w]hile Eder does not disclose creating other applications different from its own program, the language of the claim does not preclude the creation of an application like that of Eder"(p. 2, pgh. 7). However, nowhere does Eder disclose or even suggest compiling an application database and specifications to generate an executable decision-support application. Rather, Eder teaches a single application defined by a single model that calculates and displays a forecast of the impact of user-specified or system-generated changes in business value drivers on other value drivers, elements, financial performance and long-term value of a commercial enterprise, based on information from a detailed valuation of the enterprise (col. 5, lines 1-9). Unlike the invention as recited in claim 106, which enables the creation of a custom application to assist in the decision-making process, Eder is limited to a single application for a single purpose, whose specifications are set forth in Eder's specification. The suggestion that there might hypothetically be some implementation of Eder's invention that would involve compiling code is a fabrication of the Examiner, and not a teaching or suggestion of Eder, and because Eder fails to disclose compiling an application database and specifications to generate an executable decision-support application, it cannot be said that Eder anticipates claim 106. For similar reasons, claims 113 and 114 are novel over Eder. Since claims 107-112 depend from claim 106, it is further submitted that those claims are also novel over Eder. The foregoing arguments are fully explained at p. 17 of the Amendment.

Rejection of Claims 115-121 as Anticipated by Eder

Claim 115 recites, *inter alia*, "(a) generating, based on user input, a plurality of alternative scenarios representing possible evolutions of a baseline scenario;" "(c) simulating outcomes of each of the strategies for each of the alternative scenarios over time;" and "(d) providing output data, based on the simulated outcomes, to permit comparison of the simulated outcomes for each of the strategies." As argued above with reference to claims 64-105, Eder fails to disclose the creation of a plurality of scenarios in a decision domain. Moreover, since Eder fails to disclose a plurality of scenarios in a decision domain, Eder also fails to disclose additional features of claim 115, including, e.g.: "(c) simulating outcomes of each of the strategies for each of the alternative scenarios over time;" and "(d) providing output data, based on the simulated outcomes, to permit comparison of the simulated outcomes for each of the strategies." In Eder, there is no simulation of the projected outcomes of employing different

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strategies that influence each a plurality of alternative scenarios (as in step (c)) – there is only simulation of the projected outcome of employing different strategies for a single scenario. Because outcomes of only a single scenario are being projected in Eder, there is no provision of output data to permit comparison of simulated outcomes for each of the strategies (as in step (d)) – there is only the provision of output data of the simulation outcome for a single scenario. Since Eder does not disclose (i) a plurality of alternative scenarios in the decision domain, nor (iii) simulating outcomes of each of the strategies for each of a plurality of alternative scenarios over time, nor (iv) providing output data, based on the simulated outcomes, to permit comparison of the simulated outcomes for each of the strategies, it cannot be said that Eder anticipates claim 115. For similar reasons, claims 120 and 121 are novel over Eder. Since claims 116-119 depend from claim 115, it is further submitted that those claims are also novel over Eder. The foregoing arguments are fully explained at pp. 17-18 of the Amendment.

Rejections of Claims 67, 73, 75, 76, 77, 78, 79, 101, and 103 as Anticipated by Eder and Claim 117 as Obvious over Eder

Claim 67 recites, *inter alia*, that "each of the one or more alternative scenarios corresponds to assumptions about one or more situational forces, trends, events, and entity behaviors that drive a plausible alternative evolution of the baseline scenario over one or more future time instants." Claim 73 recites, *inter alia*, that "the simulation of step (c) is based on situational dynamics including one or more behavioral rules, formulas, trends, and algorithmic methods characterizing changes in one or more alternative scenario parameters caused by one or more behaviors of one or more entities." Claim 75 recites, *inter alia*, "storing persistently, for each candidate decision represented by the candidate decision parameters, scenario parameters corresponding to baseline and alternative scenarios received in step (b)." Claim 76 recites, *inter alia*, "storing persistently, for outputs produced by simulations of alternative scenarios and candidate decisions over one or more future time instants, all changes in scenario entities and attribute parameters of the scenario entities simulated in step (c)." Claim 77 recites, *inter alia*, "graphically displaying one or more summaries of changes in alternative scenario parameters corresponding to the simulated alternative scenarios over one or more future time instants for purposes of analyzing projected outcomes of simulated candidate decisions." Claim 79 recites, *inter alia*, that "the summaries enable comparative analysis of one or more differences, strengths and weaknesses of candidate decisions in achieving desired results across alternative scenarios." Claim 101 recites, *inter alia*, that "the analyses permit comparison of entity attribute parameter values over one or more future time instants across simulation runs of different candidate decisions under alternative scenarios." Claim 103 recites, *inter alia*, that "at least one intervention is a strategy not to influence the alternative scenario parameters." Claim 117 recites, *inter alia*, that "the optimal strategy is a strategy that displays superior values of performance metrics across the plurality of alternative scenarios." As argued above with reference to claims 64-105, Eder fails to disclose the existence of a plurality of scenarios in a decision domain, and alternative scenarios and alternative scenario parameters do not exist in Eder. The Applicant submits therefore that the above discussion provides additional reasons for the assertion that claims 67, 73, 75, 76, 77, 79, 101, 103, and 117 are allowable over Eder. Since claim 79 depends from 77, it is further submitted that this claim is also novel over Eder for the same reasons discussed above with reference to claim 77. The foregoing arguments are fully explained at pp. 18-26 and 30 of the Amendment.

Rejection of Claim 74 as Anticipated by Eder

Claim 74 recites, *inter alia*, that "the situational dynamics are specified either (i) as pre-defined elements in the decision domain model, (ii) via user-specified attribute parameters, or (iii) both pre-defined elements in the decision domain model and via user-specified attribute parameters." The Examiner cites col. 5, line 31 – col. 6, line 25 of Eder as purportedly disclosing the foregoing, but the cited portion discloses nothing about user-specified attribute parameters. In the Advisory Action, the Examiner argues that, in Table 1, "there are input values such as 'excess cash & marketable securities' which are clearly user-specific and would need to be specified by the user" (p. 2, pgh. 8). However, claim 74 recites user-specified attribute parameters, not user-specified values for predefined attribute parameters, as the Examiner suggests. The attribute parameters in Table 1 are all predetermined and fixed attribute parameters, not user-specified attribute parameters. The software of Eder provides these parameters for the user, and there is no provision in Eder for a user to specify his or her own parameters. This is because, as argued above with respect to claim 64, Eder does not disclose the ability to handle multiple decision-making domains. The attributes in Table 1 are predefined in Eder's software application and represent various elements of a business enterprise that are involved in financial valuation of the enterprise. The present invention, as claimed in claim 74, however, supports multiple database tables for storing multiple attributes of multiple decision domains, which could range, e.g., from business-related decisions to political, military, or healthcare-related domains. This is one reason why "user-specified attribute parameters" for specifying situational dynamics is recited in claim 74. Another reason is to permit users to define new parameters on the fly within a single decision model. Eder has no need for user-specified parameters because Eder is a fixed framework for a single domain, namely, the financial valuation of an enterprise. The Applicant submits therefore that the above discussion provides additional reasons for the assertion that claim 74 is allowable over Eder. Moreover, since claim 74 depends from claim 73, it is further submitted that this claim is also novel over Eder for the same reasons discussed above with reference to claim 73. The foregoing arguments are fully explained at pp. 19-20 of the Amendment.

Rejection of Claim 100 as Anticipated by Eder

Claim 100 recites, *inter alia*, that "the analyses include one or more (i) graphic time series and histogram charts of scenario attributes and (ii) tabular reports summarizing changes in entity attribute parameter values over one or more future time instants." These analytics allow comparison of outcomes for one or more candidate strategies across one or more scenarios within a given decision model. As argued above with respect to claims 64-106, Eder does not disclose the creation of a plurality of scenarios in a decision domain. Eder does not disclose,

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nor does Eder have a need for user-specified analyses of different scenarios or parameters from different domain models because Eder is a fixed framework for a single domain, namely, the financial valuation of an enterprise. The Applicant submits therefore that the above discussion provides additional reasons for the assertion that claim 100 is allowable over Eder. The foregoing arguments are fully explained at pp. 24-25 of the Amendment.

Rejection of Claim 102 as Anticipated by Eder

Claim 102 recites, *inter alia*, that "at least one intervention is <u>a strategy, plan, investment, or other proposed course of action</u> for influencing a scenario in a desired manner." The Examiner cites to col. 6, lines 44-64 and col. 46, line 46 – col. 47, line 8, of Eder as purportedly disclosing this feature and argues in the Advisory Action that "the user using the invention of Eder to simulate the effect of particular changes in value drivers ... can be a strategy that is being tested" (p. 3, pgh. 2). While these passages do describe the use of value drivers in a simulation, these value drivers, whether their values are system-generated or user-specified, do not include any interventions that are proposed courses of action for influencing scenarios, and a mere set of value drivers is not a strategy or proposed course of action. These value drivers are static, i.e., a one-shot plan (or set of goals that don't necessarily specify how such goals are to be reached), whereas strategies, as claimed in claim 102, include processes over time and can include adaptation, i.e., what to do if the environment changes or if other parties change their strategies/behaviors. There are no such strategies in Eder. The Applicant submits therefore that the above discussion provides additional reasons for the assertion that claim 102 is allowable over Eder. The foregoing arguments are fully explained at pp. 25-26 of the Amendment.

Rejection of Claim 110 as Anticipated by Eder

Claim 110 recites, *inter alia*, that "step (a) comprises providing a <u>software development environment</u> for a user to create the decision model, wherein <u>the decision model is application-specific</u>." The Examiner cites to col. 46, line 46 – col. 47, line 8, of Eder as allegedly disclosing this feature and argues in the Advisory Action that "Eder discloses a decision model that is application-specific, that is, it is a decision model specifically designed for the application. Since such a piece of software is disclosed in Eder, a software development environment must have existed to create that software, so that is disclosed by Eder as well" (p. 2, pgh. 3). Nowhere does Eder disclose providing a software development environment to create a decision model, and the Examiner's argument that Eder discloses such an environment is a fabrication of the Examiner, and not a teaching or suggestion of Eder. Indeed, a programming language, such as a language used in creating Eder's financial valuation software, is considerably different from the software development environment as claimed in claim 110, which includes not only languages, but also a set of modeling tools and automatic code generator tools with an associated process. There is no such software development environment in Eder. Because Eder fails to disclose providing a software development environment for a user to create the decision model, it cannot be said that Eder anticipates claim 110. The foregoing arguments are fully explained at p. 26 of the Amendment.

Rejection of Claim 116 as Anticipated by Eder

Claim 116 recites, *inter alia*, that "the outcomes include one or more performance metrics to permit selection of an optimal strategy." The Examiner cites to col. 6, lines 44-64 and col. 46, line 46 – col. 47, line 8, of Eder as purportedly disclosing this feature and argues in the Advisory Action that "the user using the invention of Eder to simulate the effect of particular changes in value drivers ... can be a strategy that is being tested" (p. 3, pgh. 4). While these passages do describe the use of value drivers in a simulation, these value drivers, whether their values are system-generated or user-specified, do not involve the selection of <u>a strategy</u> from among a plurality of strategies, or decision options. As discussed above with respect to claim 102, a strategy is more than Eder's static numbers and represents a set of (possibly adaptive) actions and/or behaviors over time. The performance metrics (i.e., outputs) recited in claim 116 are generated on the fly for various applications. To the contrary, Eder's outputs are fixed, just like Eder's inputs. Eder simply does not disclose or even suggest the notion of strategy. Eder does not at all teach outcomes that "include one or more performance metrics to permit selection of an optimal strategy," as claimed in claim 116, <u>because Eder employs no such strategies from which to select an optimal strategy</u>. Thus, it cannot be said that Eder anticipates claim 116. The Applicant submits therefore that the above discussion provides additional reasons for the assertion that claim 116 is allowable over Eder. The foregoing arguments are fully explained at pp. 26-27 of the Amendment.

Rejection of Claim 119 as Anticipated by Eder

Claim 119 recites, *inter alia*, that "the decision domain is selected from the group consisting of: structure of legislation, public policy, competitive strategy, change management, portfolio management, military strategy, and corporate governance." The Examiner cites to col. 6, lines 44-64 and col. 46, line 46 – col. 47, line 8, of Eder as purportedly disclosing "competitive strategy" as the decision domain and argues that "since a more highly valued enterprise reflects a greater advantage over competitors, Eder does indeed address making decisions with respect to competitive strategy" (p. 3, pgh. 5). The present invention provides a dynamic behavioral model – in other words, the candidate decisions represent behaviors of actors or entities in the simulation, and the effects of making these decisions or exercising these behaviors can be seen for a plurality of different possible future sets of circumstances or scenarios. Eder's static behavioral model does not permit this to be done for a plurality of entities or actors – Eder's decision domain model describes only a single entity, the enterprise, and its behaviors for purposes of valuation. Eder does not at all teach a simulation involving "competitive strategy," as argued by the Examiner. Competitive strategy involves adaptation (e.g., stimulus-response) or changing in response to performance and perceived changes in a given environment, which is something Eder's software is simply incapable of modeling, and Eder does not ever disclose or even suggest doing so. The Applicant submits therefore that the above discussion provides additional reasons for the assertion that claim 119 is allowable over Eder. The foregoing arguments are fully explained at pp. 27-28 of the Amendment.

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Rejection of Claim 70 as Obvious over Eder and Honarvar

Claim 70 recites, *inter alia*, that "the attribute parameters are permitted to assume values of any one or more of the following data types: integer or real numbers, symbols, lists, tables, vectors, relationships, interval ranges, free text, and Boolean descriptors." The Examiner cites col. 46, line 46, through col. 47, line 8 of Eder as allegedly disclosing that "the attribute parameters are permitted to assume values of real numbers." However, the list of data types set forth in claim 70 are recited in the conjunctive ("the attribute parameters are permitted to assume values of <u>any one or more</u> of the following data types ..."), not the disjunctive ("each attribute parameters is of a data type selected from the group consisting of ..."). Thus, to satisfy the claim limitations of claim 70, the attribute parameters must be permitted to assume values of <u>any</u> of the recited data types. In Eder, the attribute parameters are permitted to assume <u>only numeric data types</u>. Since Eder fails to disclose or even suggest at all the use of attribute parameters that "are permitted to assume values of any one or more of the following data types: integer or real numbers, symbols, lists, tables, vectors, relationships, interval ranges, free text, and Boolean descriptors," Eder cannot render obvious claim 70. Nor does Honarvar supply the missing teachings. The Applicant submits therefore that claim 70 is allowable over Eder and Honarvar. The foregoing arguments are fully explained at p. 28 of the Amendment.

Rejection of Claim 111 as Obvious over Eder and Kramer

Claim 111 recites, *inter alia*, the substeps of: "(i) using an <u>automated code generator</u> to generate code embodying relational schema and metadata from entity type specifications; and (ii) <u>editing</u> and executing <u>the code</u> to generate relational schema and metadata for the decision model, wherein the decision model is application-specific." The Examiner cites to Eder at col. 5, lines 16-30; col. 9, line 41, to col. 10, line 15; and col. 46, line 46, to col. 47, line 8, and Kramer at col. 5, lines 46-61, as disclosing the foregoing steps. However, nowhere in the cited portions of Eder or Kramer is the use of an automated code generator disclosed, nor is editing executable code disclosed. The Applicant submits therefore that claim 111 is allowable over Eder and Kramer. The foregoing arguments are fully explained at p. 29 of the Amendment.

Rejection of Claim 82 as Obvious over Eder and Huang

Claim 82 recites, *inter alia*, that "step (b) comprises storing <u>baseline scenario parameters</u> and permitting user entry of <u>alternative scenario parameters</u> by copying <u>baseline</u> or <u>alternative scenarios</u> and altering one or more of the copied scenario parameters." As argued above with reference to claims 64-105, Eder fails to disclose the creation of a plurality of scenarios in a decision domain. Huang also fails to disclose the use of more than a single scenario. Thus, there are no "baseline" or "alternative" scenarios or parameters corresponding thereto in Eder or Huang, and consequently, there can be no storage or copying of "<u>baseline scenario parameters</u>" or "<u>alternative scenario parameters</u>." The Applicant submits therefore that claim 82 is allowable over Eder and Huang. The foregoing arguments are fully explained at p. 29 of the Amendment.

Rejections of Claims 88 and 93 as Obvious over Eder and Steinman; Claim 92 as Obvious over Eder and Eicher; Claim 94 as Obvious over Eder and Ball; and Claim 97 as Obvious over Eder and Watanabe

Claims 88, 92, 93, 94, and 97 all refer to step (c) of claim 64, which recites "(c) simulating, for one or more future time instants, each of the one or more alternative scenarios as influenced by (i) each candidate decision represented by the candidate decision parameters and (ii) parameters characterizing assumptions in alternative scenarios." Nowhere do Eder, Steinman, Eicher, Ball, or Watanabe teach, disclose, or even suggest the simulation of a <u>baseline scenario</u> and <u>one or more alternative scenarios</u>, as fully argued above with reference to claims 64-105. Thus, no combination of any of these references can render these claims obvious. The foregoing arguments are fully explained at pp. 30-32 of the Amendment.

Rejection of Claim 118 as Obvious over Eder and Abu El Ata

Claim 118 recites, *inter alia*, "(f) updating the <u>alternative scenarios</u> based on the simulated outcome of the selected optimal strategy; and (g) simulating results of each of an updated plurality of strategies based on the <u>updated alternative scenarios</u>." As argued above with reference to claims 64-105, Eder fails to disclose the creation of a plurality of scenarios in a decision domain. The Examiner cites to Abu El Ata as disclosing the foregoing steps. However, Abu El Ata also fails to disclose the use of more than a single scenario. There are no "alternative" scenarios or parameters corresponding thereto in Eder or Abu El Ata, and thus, there can be no "updating the alternative scenarios based on the simulated outcome of the selected optimal strategy" or "simulating results of each of an updated plurality of strategies based on the updated alternative scenarios." Moreover, the mention of a "feedback loop" in Abu El Ata is not at all what is claimed in claim 118, because this feedback loop accounts for design requirements that do not change over time during the modeling process of Abu El Ata. To the contrary, the present invention, as claimed in claim 118, permits an entire decision or strategy to be revisited periodically using updated information generated by the simulated outcome of a prior optimal decision or strategy, thereby providing robustness over time. The Applicant submits therefore that claim 118 is allowable over Eder and Abu El Ata. The foregoing arguments are fully explained at pp. 33-34 of the Amendment.

Rejections of Claims 71, 72, and 111 as Obvious over Eder and Kramer; Claim 82 as Obvious over Eder and Huang; Claim 86 as Obvious over Eder and Kim; Claims 88 and 93 as Obvious over Eder and Steinman; Claim 92 as Obvious over Eder and Eicher; Claim 94 as Obvious over Eder and Ball; Claim 97 as Obvious over Eder and Watanabe; and Claim 118 as Obvious over Eder and Abu El Ata

All of the cited secondary references are clearly non-analogous art and are not properly combinable with Eder. The Applicant submits therefore that claims 71, 72, 82, 86, 88, 92, 93, 94, 97, 111, and 118 are allowable over the cited references. The foregoing arguments are fully explained at pp. 28-34 of the Amendment.